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ZIMBABWE AGRICULTURAL INCOME AND EMPLOYMENT DEVELOPMENT (Zim-AIED) QUARTERLY REPORT #3, 2012



July 2012

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AGRICULTURAL INCOME AND EMPLOYMENT DEVELOPMENT (AIED)

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The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

ACRONYMS

AGRITEX	Agricultural, Technical, and Extension Services
AN	Ammonium Nitrate
APS	Annual Program Statement
ASP-Z	Agro dealer Strengthening Program in Zimbabwe
BDS	Business Development Services
BiZ	Bio-Innovation Zimbabwe
CA	Conservation Agriculture
CABS	Central African Building Society
CBOs	Community Based Organizations
CBZ	Commercial Bank of Zimbabwe
CFU	Commercial Farmers Union
CIRIS	Client Impact and Results Information System
CLUSA	Cooperative League of the United States of America
COMESA	Common Market for Eastern and Southern Africa
CSOs	Civic Society Organizations
EA	Environment Assessment
EMA	Environmental Management Agency
EMMP	Environmental Mitigation and Monitoring Plan
EPA	Environmental Protection Agency
EU	European Union
FAB	Farming As a Business
FTF	Feed The Future
GAP	Good Agriculture Practice
GMO	Genetically Modified Organism
GMS	Gender Mainstreaming
GoZ	Government of Zimbabwe
HACCP	Hazardous Analysis Critical Control Points
HPC	Horticultural Promotion Council
IEE	Initial Environmental Examination
IMC	Irrigation Management Committee
IPM	Integrated Pest Management
IR	Intermediate Result
IRD	International Relief and Development
IRS	Indoor Residual Spray
M & E	Monitoring and Evaluation
MAMID	Ministry of Agriculture, Mechanization and Irrigation Development
MLRP	Mashonaland Livelihoods Restoration Project
MOU	Memorandum of Understanding
MSDS	Material Safety and Data Sheets
MSME	Micro, Small and Medium Enterprise
NRM	National Resource Management
PERSUAP	Pesticide Evaluation Report and Safe Use Action Plan

PHI	Pre-Harvest Interval
PIC	Prior Informed Consent
PMP	Performance Management Plan
PMP	Pest Management Plan
POP	Pesticide Organic Pollutant
PRIZE	Promoting Recovery In Zimbabwe Project
REALIZ	Restoring Economic Agricultural Livelihoods in Zimbabwe Program
REVALUE	Restoring Livelihoods Strengthening Value Chains Program
RUP	Restricted Use Pesticides
S and C	Standards and Certification
SAT	Sustainable Agriculture Trust
STAMP	Smallholder Technology and Access to Markets Program
STTA	Short-Term Technical Assistance
SNV	SNV Netherlands Development Organization
SUAP	Safe Use Action Plan
SUR	Safe Use Recommendations
TBD	To Be Determined
TBT	Tjinyunyi Babili Trust
ToT	Training of Trainers
USAID	United States Agency for International Development
USG	United States Government
USEPA	United States Environmental Protection Agency
WHO	World Health Organization
ZAPAD	Zimbabwe Agriculture Production and Agribusiness Development Program
ZESA	Zimbabwe Electricity Supply Authority
ZFAT	Zimbabwe Farmers Alliance Trust
ZFU	Zimbabwe Farmers Union
Zim-AIED	Zimbabwe Agricultural Income and Employment Development
ZINWA	Zimbabwe National Water Authority

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FOREWORD

The Zimbabwe Agricultural Income and Employment Development (Zim-AIED) program began in October 2010, and will run through February 2015. Zim-AIED is providing technical assistance to improve food security and increase household incomes of small-scale farmers throughout Zimbabwe, covering all agro-ecological regions (Regions I-V). It is generating new income streams from employment created in the wider agricultural sector and contributing to improved food security for all beneficiary households. Beneficiaries are earning new income from both surplus production of food crops grown for home consumption and from production and marketing of higher-value cash crops under contract.

Zim-AIED is commercializing small-scale growers on communal and non-contested land by:

- Linking producers to local, national, regional, and international buyers.
- Providing access to credit.
- Raising efficiencies in production systems for an improved combination of cash and food crops.
- Training farmers to adopt good business practices.

The program is building demand for a range of Zimbabwean crops and products by training growers on productivity, quality, continuity, and cost-competitiveness. It is also providing specialized technical support for the production of food crops to increase food availability on a sustainable basis in areas and communities most vulnerable to food insecurity.

Fintrac, a US-based consultancy company, is implementing Zim-AIED in cooperation with four subcontractors and grantees: International Relief and Development (IRD); the Cooperative League of the USA (CLUSA); Sustainable Agricultural Technology (SAT); and CARE International. Other local nongovernmental organizations (NGOs) and commercial companies work with the program as development partners, in some cases co-funded through a cost-sharing grant facility. This \$5 million facility is used to leverage technical support for farmers through conventional grants, and also to fund purchases of essential inputs and new technologies on a cost-recovery basis, including interest at fair commercial rates. Zim-AIED also includes a \$10 million revolving loan fund – AgriTrade – managed by three local banks that provide matching funds and provide loans on competitive commercial terms.

In summary, Zim-AIED is a market-driven program that works closely with small-, medium-, and large-scale buyers to raise demand and increase competition for smallholder-grown crops and products. It is contributing directly to food availability and access by concurrently increasing production of food crops and raising incomes of rural households.

I. EXECUTIVE SUMMARY

This is the seventh quarterly report of the Zimbabwe Agricultural Income and Employment Development (Zim-AIED) program. Zim-AIED is providing technical assistance to improve food security and increase household incomes of 180,000 small-scale farmers throughout Zimbabwe. Significant results for this quarterly period (April-June 2012) are summarized below:

- Activities were directed at increasing the number of companies purchasing products from smallholders; increasing the availability and disbursement of working capital to rural-based agritraders serving farmers on communal land; increasing production of maize and other food crops; raising smallholder earnings from cash crops; and actively supporting agribusiness investors in rural areas.
- A total of **6,645 rural households received various types of technical assistance** this quarter to raise productivity, access new markets, obtain credit, and increase incomes and employment. The total number of new households assisted for the year-to-date is 45,326, already 37 percent over the target for FY 2012.
- The **total sales recorded from program beneficiaries were valued at \$3.99 million** for this quarter, bringing the total for the year to \$9.34 million. The program established reliable market linkages with buyers, including many rural traders borrowing through AgriTrade, that are projected to purchase produce worth more than \$20 million from Zim-AIED-assisted farmers by the end of the year.
- **Twenty-seven percent of Zim-AIED beneficiaries are producing crops under contract** or through various types of marketing agreement with specific buyers of maize, soy bean, sugar bean, groundnut, paprika, banana, and other crops.
- **Zim-AIED's revolving credit facility (AgriTrade) grew during the reporting period** with an additional 113 loans disbursed worth \$1.12 million. To date, AgriTrade has lent \$6.54 million to 757 borrowers and 362 of these were active borrowers at the end of June 2012. Cattle (58%), maize (17%), inputs (11%), and potato (6%) were the main products purchased from loan funds. Direct credit to farmers increased through commercial loans and buyer advances.
- **Direct commercialization support was provided to 10 irrigation schemes** this quarter, offering technical assistance to 2,684 plot holders on water management, market planning, and new crop production under contract to specific buyers.
- **The total of sub-grants disbursed and under implementation reached \$2.45 million**, equivalent to 49% of the sub-grant budget. The grants are supporting a wide range of productivity-enhancing, postharvest, and marketing interventions with smallholders and 62% of the total is for "recoverable grants" that the beneficiary farmers and companies have agreed to re-pay from sales returns for re-cycling into new activities.
- The program **implemented a gender mainstreaming policy** whereby men, women, young people, and disadvantaged groups were specifically considered in the planning of all program interventions. As a result, 50 percent of all beneficiaries receiving program assistance were women.
- After 21 months of implementation, **Zim-AIED is on course to meet its main objectives and targets**. An assessment of progress toward meeting the 2012 targets set for Zim-AIED's 12 Feed the Future indicators concluded that most should be met and some will be exceeded.

2. PROGRAM OBJECTIVES

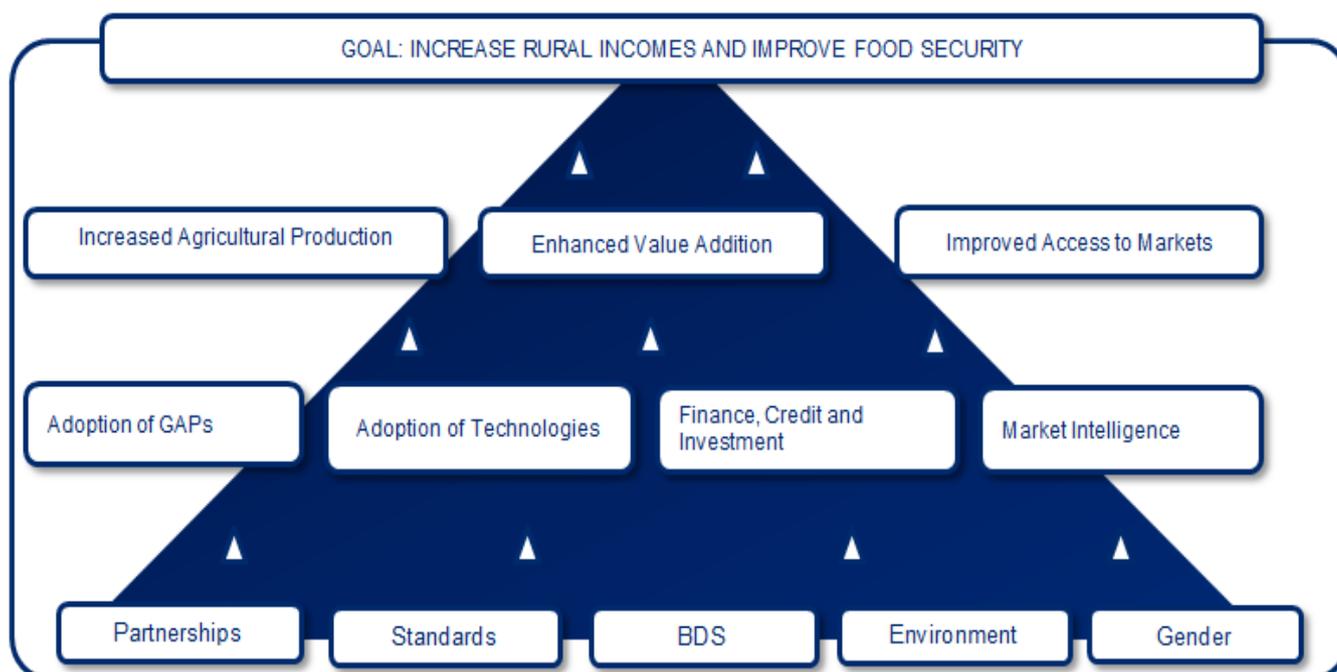
The primary objective of the Zim-AIED program is to improve food security for 180,000 Zimbabwean small-scale farmers by increasing household incomes from agriculture and increasing food production among vulnerable but commercially viable farmers. This goal will be reached through the achievement of three intermediate results:

1. *Increased Agricultural Production*: measured through change in total production, productivity, crop yields; changes in product mix to include higher value crops; and changes in area under production at the household and national level. The emphasis is on commercially viable production of both food and cash crops.
2. *Enhanced Value Addition*: measured through change in farm sales of semi-processed products and crops for processing, new employment generation in added value products, and investment in processing facilities.
3. *Expanded Market Access*: measured through change in volume and value of sales of targeted commodities and integration of farmers into outgrower and contract farming schemes.

Although the focus of Zim-AIED is on profitable food and cash crop production, income generation and employment, interventions focus on improving the livelihoods of “vulnerable but viable” farmers through sustainable commercial initiatives. The aim is to move rural families from subsistence to commercial farming and increase their asset base through investment in perennial crops and livestock.

Figure 1 shows the results framework for the implementation of Zim-AIED. The program focuses on interventions that expand market access, increase the availability of credit and finance across the value chain, raise production, and add value to products. To maximize outreach and ensure sustainability, these interventions are carried out via partnerships with commercial companies with additional support from NGOs, particularly in vulnerable areas. The program’s technical team is developing commercial partnerships to create a national network of agribusinesses that can guarantee access to markets at fair prices; provide working capital and finance at realistic rates; supply inputs efficiently; and provide extension and training to growers as an embedded cost. During this reporting period, the Zim-AIED technical team focused on:

- **Market linkages** – increasing the number of companies purchasing products from smallholders both through contracts and by opportunistic buying.
- **Finance and credit** – increasing the availability and disbursement of working capital to rural-based agribusiness investors and to agritraders buying products from smallholders at the village level and supplying inputs. Increasing direct credit to farmers through commercial loans, advances from buyers, and recoverable grants.
- **Staple food crops** – increasing local and national production of maize, groundnuts, and root crops at competitive prices.
- **Cash crops** – raising smallholder earnings through surplus production of food crops and commercial production of high-value cash crops, particularly banana, vegetables and paprika.
- **Rural entrepreneurs** – actively supporting a new generation of small- and medium-sized agribusinesses willing to invest in rural areas across Zimbabwe.

Figure 1: Zim-AIED Summary Results Framework

3. ACTIVITIES

Program activities were carried out across the country and included a wide range of interventions, from credit for livestock traders to crop-specific irrigation and marketing assistance. The sections below describe Zim-AIED activities in six categories that reflect the results-based indicators, the technical approach, and priorities chosen to achieve program objectives.

- Beneficiaries – number, gender balance, geographical spread, and types of support received
- Sales and Incomes – amount of new money in the pockets of Zim-AIED beneficiaries
- Market Access – research, analysis, planning, and new business development
- Finance and Credit – AgriTrade revolving fund and micro-credit support for rural traders
- Business Development – recordkeeping, crop budgets, marketing and contract production
- Productivity – increased sales and net incomes from crop and livestock products

3.1 BENEFICIARIES AND GEOGRAPHICAL COVERAGE

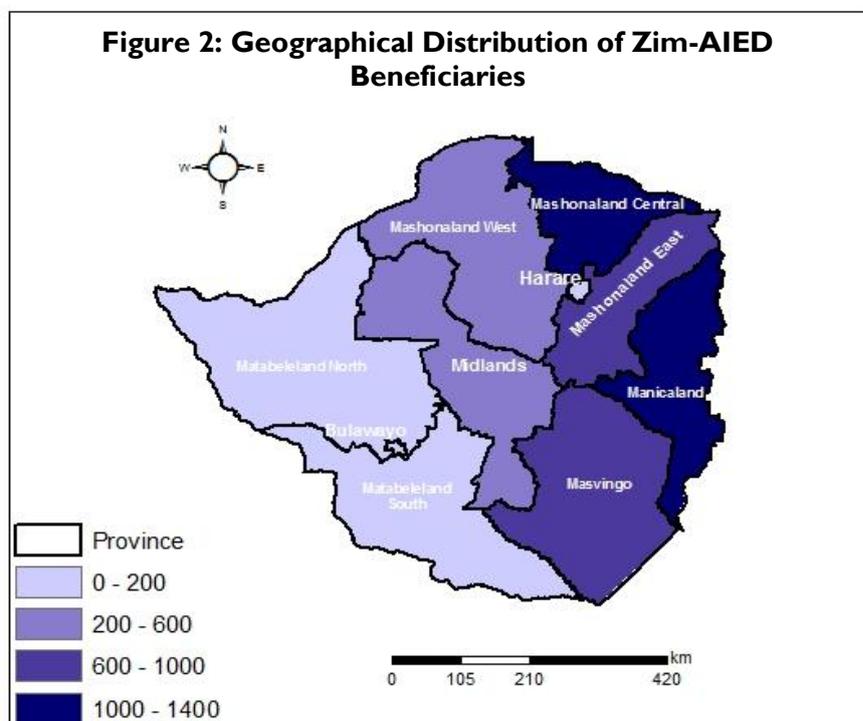
The life-of-program target for Zim-AIED is to increase the incomes and food security of at least 180,000 farmers (approximately equivalent to 150,000 rural households) including 33,000 this year. Income generation is being achieved through a wide range of interventions including training in agronomy and business skills; direct technical assistance to introduce new technologies; credit for producers and MSMEs; and creation of new market linkages. During the period under review, 6,645 households joined the Zim-AIED program, bringing the annual cumulative figure to 45,326. Table 1 provides an analysis of the number of rural households that have benefited from Zim-AIED's interventions in the first nine months of this reporting year (October 2011-September 2012).

Table 1: Geographical location of Zim-AIED beneficiaries Q1-Q3, FY2012

Number of rural households								
	Q1	Q2	Q3				Q1+Q2+Q3	
Province	Total	Total	M	F	Total	%	Total	%
Manicaland	3,838	3,463	853	848	1,701	26	9,002	20
Mashonaland Central	954	2,698	603	691	1,294	19	4,946	11
Mashonaland East	2,768	3,935	627	502	1,129	17	7,832	17
Mashonaland West	2,232	3,837	352	308	660	10	6,729	15
Masvingo	5,041	2,757	367	532	899	13	8,697	19
Matabeleland North	295	693	39	32	71	1	1,059	2
Matabeleland South	599	1,594	105	139	244	4	2,437	6
Midlands	2,784	1,193	378	269	647	10	4,624	10
Total	18,511	20,170	3,324	3,321	6,645	100	45,326	100
Agribusinesses	221	118			113		452	

Source: CIRIS

The program is operating in all Provinces of Zimbabwe with regional offices in Harare, Mutare, Gweru, and Bulawayo (Table 1, Figure 2). Farmers in Manicaland, Mashonaland East, and Masvingo currently make up 56 percent of the total participants in the program. Midlands, Mashonaland West and Central account for 36 percent and the Matabeleland provinces include just 8 percent at present, although new livestock and irrigation initiatives will increase this number in future.



New AgriTrade loans for cattle and goat purchases will also provide the incentive for farmers in Matabeleland to adopt a more commercial approach to farming. The program is targeting irrigation schemes as agribusiness hubs that can extend technical and marketing support to surrounding communities that have traditionally depended on livestock and crop production at subsistence levels to survive. Interventions this quarter were mainly on paprika and food crop production on irrigation schemes but

two new partnerships were initiated with livestock stakeholders that will increase productivity and marketing opportunities for Matabeleland farmers (see below, section 3.6.4).

Table 2: Activities provided to farmers and traders by Zim-AIED¹

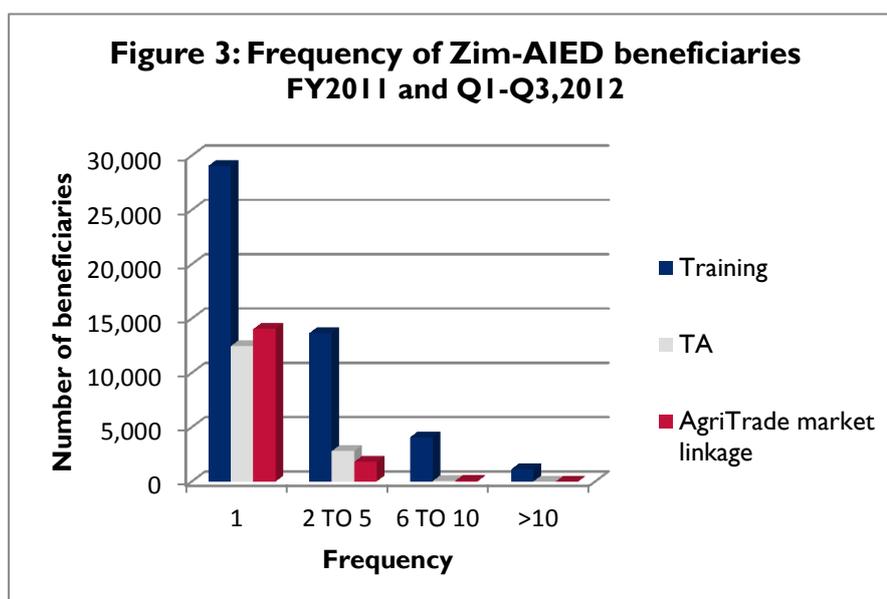
Number of people participating in Zim-AIED activities				
FY2011+FY2012				
Activity	Male	Female	Total	% of total
Training	21,692	26,585	48,277	49
Direct technical assistance	7,285	8,030	15,315	15
Traders receiving loans	507	250	757	1
AgriTrade Market Linkages	11,102	4,796	15,898	16
Contracted farmers	8,493	9,970	18,463	19
Total	49,079	49,631	98,710	100

¹ The totals shown here are higher than the number of households benefiting shown in Table 1 since many receive multiple types of assistance

Source: CIRIS

Table 2 summarizes the main types of support being provided by Zim-AIED to farm households who have joined the program. About half of all interventions involved some form of formal training in agronomy, irrigation management, basic business skills, marketing and organization capacity-building. Direct technical assistance accounted for 15% including rehabilitation of irrigation schemes, introduction of new crops and demonstration of new, productivity-enhancing technologies. Seven hundred and fifty seven traders received loans and bought from at least 15,900 beneficiary farmers. More than 18,000 Zim-AIED assisted farmers are growing crops under written contracts or marketing agreements with buyers, equivalent to 27% of beneficiary households (the 19% shown in Table 2 is less than this since the data refers to types of intervention and some households receive multiple types of support).

Figure 3 shows the frequency at which program beneficiaries took part in Zim-AIED activities. These data are collected from multiple sources and subject to upward adjustment but show that around 55,000 Zim-AIED beneficiaries have received training, technical assistance or AgriTrade credit assistance (as buyers or sellers) at least once. More than 18,000 have benefited directly two to five times and about



5,000 more than six times. Many of the farmers have joined the program in the last six months and their level of participation will increase as we move into the next production season. Overall the outreach and types of technical and marketing assistance provided appear to be having an immediate impact on household productivity and income.

In summary, during the first 21 months of implementation, Zim-AIED has reached a recorded 67,364 rural households (Table 3). They have been linked to markets, trained, and provided with direct technical assistance by Zim-AIED technical staff and through partnerships with specialized local service providers, NGOs, and private companies working with the program. This is resulting in significant and measurable increases in sales and income that will grow at an increasing rate in future.

Table 3: Rural households assisted by Zim-AIED in FY2011 and FY2012

Number of rural households assisted							
FY2011				FY2012	Q1+Q2+Q3, FY2012		
Target	Achieved	Variance	%Variance	Target	Achieved	Variance	%Variance
22,038	22,038 ¹	0	0%	33,000	45,326	12,326	37

¹This figure has been revised downwards from 23,852. About 2,177 individual farmers with missing ID numbers were deleted from CIRIS.

Source: CIRIS

3.2 SALES AND INCOME

Table 4 shows the sales recorded this year by farmers marketing through formal contracts and other types of marketing agreements intermediated by Zim-AIED. It represents a small but significant and growing proportion of total sales by beneficiaries since most take place at local level and go unrecorded. Data on total sales of agricultural products will be collected next quarter by surveying a representative sample of households.

Table 4: Sales by Zim-AIED Beneficiaries

Product	Actual Sales				Estimated Sales Q1-Q4		Buyers
	Q3 Qty (tons)	Price \$/ton	Q3 Value \$	Cum sales Q1-Q3	Qty (tons)	Value \$	
Maize	2,512	183	459,696	1,656,366	37,246	6,816,018	AgriTrade buyers, Windmill, Progene, Feya Feya
Green Maize	59	479	28,261	28,124	64	30,656	Open market
Sugar beans	48	988	47,424	47,597	1,879	1,856,452	FSG, Matanuska, Capsicum
Groundnuts	234	509	119,106	122,334	702	357,318	AgriTrade, Prime Seed, Progene
Paprika	173	1,453	251,369	250,711	1,456	2,115,568	Capsicum, Hyveld
Small grains	120	449	53,880	82,142	1,519	682,031	Progene, O'Enem, AgriTrade
Sweet Potato	115	328	37,720	37,816	152	49,856	Various AgriTrade, Open Market
Vegetables	664	575	381,800	854,728	1,739	999,925	FAVCO, Harare Produce Sales
Livestock	1,878	1,236	2,321,208	5,171,581	5,967	7,375,212	Inala, Various AgriTrade
Fruits	669	253	169,257	311,866	1,672	423,016	FAVCO, Dodhill, Interfresh
Other			126,717	779,259		13,858	Various AgriTrade
Total	6,472		3,995,332	9,342,524	52,395	20,719,910	

¹Maize include maize sales from credit facility loans given to agro dealers and sales by farmers under contract all receiving assistance from Zim-AIED team

²Livestock consist of cattle bought from loans issued by the credit facility and some other contracts

³Other includes niche vegetables, fish, and chickens.

Recorded sales increased to \$3.95 million this quarter, up from \$2.95 million and \$2.39 million recorded in the first and second quarters, respectively. Sales of livestock and maize constitute more than 60 percent of all the sales for the quarter, much of it through rural traders borrowing from AgriTrade. Other Zim-AIED assisted farmers were able to market sweet potato, paprika, and pigeon peas while those with irrigation sold oranges, green maize, paprika, bananas, and high-value vegetables. The total sales recorded for the year reached \$9.34 million and are projected to reach at least \$20 million by September.

Prices of most products are up on 2011 with paprika showing the highest unit prices this quarter, increasing to \$1.50 for the Grade A from \$1.30 per kilogram paid last year. Sugar bean was in demand with prices reaching \$1.20 per kilogram in June after frost destroyed part of the crop in several parts of the country.

3.3 MARKET ACCESS

Market access data provided by commodity buyers was a crucial factor in the selection of Zim-AIED target products over the past eighteen months, combined with production and trade statistics, crop budgets, and assessments of domestic, regional, and global demand. The potential competitiveness of smallholder producers is continuously evaluated for new crops and products requested by processors and trading companies. Specific market directed activities this quarter included:

- Maintenance and growth of a buyer inventory for each target crop (Annex 3).
- Identification of new buyers and assessment of their willingness and ability to enter into contracts with growers and traders- passion fruit buyers and exporters.
- Monitoring and maintenance of buyer activities, problems, and interests.
- Collection and analysis of baseline data on historical production and trade.
- Collection and analysis of production data and historical price information to update crop and product budgets.
- Assessment of market size, average prices, and net returns that growers could achieve for each potential target crop.
- Evaluation of comparative and competitive advantages of potential target products.
- Training in standards compliance and postharvest systems.
- Review and analysis of market information.
- Production and distribution of product and market information bulletins. Since the start of Zim-AIED, eight detailed market analyses have been completed for crops and products with potential for smallholder production – paprika, sweet potato, chilli (Tabasco types), avocado, passion fruit, processed guava, macadamia and groundnut. Highlights of these market analyses are shown in Table 5.

Table 5: Zim-AIED Market survey

Name & Bulletin #	Date	Zim-AIED Potential	Description
Paprika # 1	December 2010	***	EU Imports of paprika is dominated by the eastern countries with China being the highest supplier in 2009 and Zimbabwe's exports to the EU where just 154 tons. EU paprika prices ranges from \$2.25 to \$4.63 per kg for the period 2008 through to 2010. EU market has stringent quality requirements, which reduces the level of paprika import to EU by Zimbabwe and other countries. There is a large gap on the supply to EU markets of which Zimbabwe can take advantage.
Sweet Potato # 2	May 2011	***	World production of sweet potatoes is about 100,000 tons per year. Of all this, demand of sweet potato is approximately 68,000 tons. The orange fleshed and purple skin-white flesh varieties are the most preferred on the EU markets because of its long shelf life and easy preparation.
African Birds Eye Chilli # 3 (Tabasco types)	May 2011	**	EU imports of the African Birds Eye Chillies are shown to be decreasing over the last five years. Zimbabwe and Malawi are the major suppliers of chillies to the EU market. Price per ton of chillies in Europe ranges from \$3,500 to \$6,200.

Table 5: Zim-AIED Market survey

Name & Bulletin #	Date	Zim-AIED Potential	Description
Avocado # 4	June 2011	*	The EU is the second largest market after US with South Africa, Peru, and Israel being the suppliers. Zimbabwe is among some other African countries supplying the EU market though volumes are low. On average the prices range from \$1.24 to \$3.24 per kg, with the summers having lower prices. Avocado's demand is driven by its potential uses and benefits.
Passion Fruit # 5	February 2012	***	Passion fruit demand is low in Zimbabwe compared to the international market, which is much larger than regional markets. South Africa is one of the biggest importers of passion fruit to the EU markets. The world production of passion fruit is about 1,200 million tons per year. The purple variety is the common variety on the EU markets and the price ranges from \$6 to \$10 per 2kg. Zimbabwean passion fruit is known to have higher quality than that of Kenya on the EU market.
Processed Guava # 6	December 2011	*	World production of processed guava is at least 5,000 million tons per year. The US and EU market for processed guava is almost the same, with South Africa and Malaysia the top exporters. There is greater potential for Zimbabwean guava market since it supplies both South Africa and the EU market.
Macadamia Nut # 7	March 2012	*	World macadamia production involves many African countries, which produce a large share of the world' supply. South Africa is the second-leading producer and the largest importer to the US in 2011. There are less trade restrictions on macadamia worldwide.
Groundnut # 8	July 2012	***	Global trade of groundnuts is between 2 to 2.5 million tons comprising of 5.7% of world production which is about 37 million ton per year. The EU is the largest world market as consumption of peanut-based snacks and confectionary is relatively high. Exportation of groundnuts by Zimbabwe is still very low, though there is great market potential.
<i>*Reflects Zim-AIED potential to increase production and market.</i>			

As a result of this systematic and commercial approach, there was no shortage of buyers for the products grown by Zim-AIED assisted smallholders. Formal marketing arrangements were few at the beginning but are increasing rapidly as buyers adapt to the challenge of buying from a large number of small-scale producers. About a quarter of Zim-AIED beneficiaries sold part of their production through some kind of contract or recorded marketing agreement this quarter although these transactions represent a much lower proportion of total sales.

Technical support for marketing focused on establishment of contracts and agreements – formal and informal, planned and opportunistic – between growers and buyers. Zim-AIED managers were in regular contact with these companies, linking them to new growers, discussing product development issues, troubleshooting on supply and quality issues, and providing direct technical assistance where needed. Zim-AIED maintains an inventory of buyers (Annex 3) and has regular contact with many other companies who buy from assisted smallholders but, for various reasons, do not want to commit to agreements in advance of harvesting seasons.

3.4 FINANCE AND CREDIT

AgriTrade, the Zim-AIED revolving credit fund, marked June 30, 2012 as the one-year anniversary since the first loan was disbursed. Within this year, a total of 900 applications have been reviewed with 784 loans approved. Loan disbursements total \$6.54 million of which \$2.7 million were disbursed from repayments received. As of June 30, 2012 the active portfolio stood at \$3.7 million and the partner banks have contributed \$1.4 million of their own loan capital.

The partner banks operate under a *wholesale loan agreement*, whereby they borrow funds at zero percent interest and target a dollar-for-dollar match funding with their own capital. The loan funds are then used to finance Zim-AIED's partners and agribusinesses supporting smallholder farmers on communal and "purchase" land. The partner banks assume the full credit risk of all loans extended to AgriTrade clients. The individual partner bank's borrowings and related AgriTrade portfolio, as of June 30, 2012, are summarized in Table 6:

Table 6: AgriTrade Loan Portfolio at June 30th, 2012

	CABS	Trust Bank	MicroKing	Total
Active AgriTrade Portfolio	610,000	2,288,405	822,645	3,721,050
Number of Active Borrowers	6	57	299	362
USAID/Zim-AIED Loan Capital	150,000	1,350,000	1,179,500	2,679,500
Partner Bank Loan Capital	460,000	938,405	0	1,398,405
Match Funding Ratio	3.07 to 1.00	0.69 to 1.00	0.00 to 1.00	0.38 to 1.00

The quarter's months of April through June are the low cycle for new lending in agriculture because there are no new production loans and trading loans as meaningful flow of new harvest only begin in July. As a result 113 new loans were disbursed totaling \$1,121,843. Historical quarterly disbursements are shown in Table 7.

Table 7: Number of loans disbursed

	Q4 2011	Q1	Q2	Q3	Cumulative Total
Amount of Loans Disbursed	2,532,400	1,714,537	1,173,820	1,121,843	6,542,600
Number of loans Disbursed	305	221	118	113	757
Average Loan Size	8,302	7,758	9,948	9,928	8,643

Collection efforts remain a priority and the combined efforts of Zim-AIED's AgriTrade team and the Partner Banks are showing results. The total portfolio delinquency (portfolio at risk greater than 30 days) was down from nearly 17 percent at the end of the last quarter to 13.6 percent. Table 8 itemizes the Partner Bank's portfolio at risk, as of June 30, 2012.

Table 8: AgriTrade Loan Portfolio

AgriTrade Portfolio: June 30, 2012			Current		31-60 Days		61-90 Days		91 + Days		Portfolio at Risk Greater than 30 Days	
	#	Amt	#	Amt	#	Amt	#	Amt	#	Amt	#	Amt
MK	299	822,645.11	160	656,366	52	37,592	26	27,994	61	100,694	139	166,279
% PD		100		79.8		4.6		3.4		12.2		20.2
Trust	57	2,288,405	31	2,004,922		0	1	6,717	25	276,766	26	283,483
% PD		100		87.6		0		0.3		12.1		12.4
CABS	6	610,000	4	555,000				0	2	55,000	2	55,000
% PD		100		91		0		0	9			9
Total	362	3,721,050	195	3,216,288	52	37,592	27	34,711	88	432,460	167	504,762
% PD		100		86.4		1		0.9		11.6		13.6

The largest number of AgriTrade loans continued to serve smaller borrowers in rural areas with 77 percent of all loans being \$5,000 or less. For the majority of these borrowers, AgriTrade provided them the first opportunity to access credit through the formal banking sector. These loans are critical in stimulating the rural economy and support purchases of small lots of maize and vegetables, livestock trading, and the consolidation of produce for national buyers/processors.

Maize and cattle remain the main agricultural commodities traded, representing 75 percent of commodities purchased. During this period farmers continued to exchange their stored crops and excess cattle for cash to finance household requirements. By providing credit specifically for this type of trade, AgriTrade contributes directly to the restoration of rural food markets and improved food security by financing the movement of crops and products from surplus to deficit areas.

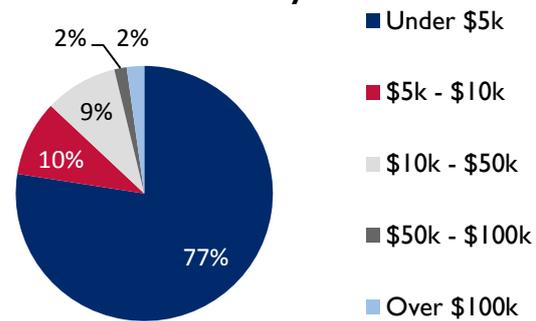
The three partner banks focus on different market segments and vary significantly in borrower profile, loan approval criteria and administration.

CABS preferred borrowers are larger agribusinesses with loan requests above \$50,000. In April 2012, CABS repaid \$250,000 to Zim-AIED during the quarter due to underutilized funds. Since then, they have increased their portfolio and now exceed the one-to-one match using \$3.07 of their own funds for every dollar provided by USAID/Zim-AIED. CABS disbursed three loans totaling \$435,000 this quarter.

Trust Bank targets mid-range clients with loan requests above \$10,000. Trust has contributed \$0.69 of their own funds for every dollar provided by USAID/Zim-AIED. Six loans were disbursed during this quarter totaling \$94,000. Trust Bank's loan approvals slowed considerably in response to a due diligence process being undertaken by a potential investor. As a result they were reluctant during the quarter to accept forms of collateral other than title deeds to property. The AgriTrade team continued to engage Trust Bank on this matter, in order to strike an acceptable balance between loan security and timely approvals/disbursement, given the time sensitivity of agricultural lending.

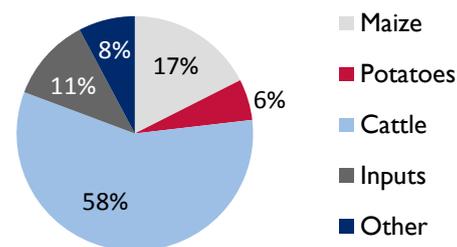
Micro King services rural clients with loan requests generally below \$25,000. In February 2012, Micro King discovered internal weaknesses and inappropriate lending under the AgriTrade program. AgriTrade was curtailed immediately and loan officers operating in violation of policy have been terminated. An investigation resulted in 150 loans totaling \$250,000 being removed from the AgriTrade portfolio. Micro King has since revised internal policies, improved controls and has restarted AgriTrade lending. A total of 104 new loans were disbursed in this quarter valued at \$592,843. With little lending activity and receipts of loan repayments, Micro King fell below the loan matching requirements. Consequently, \$600,000 of underutilized funds was requested to be repaid and was received in July, after the quarter's end.

Figure 4: Number of loans disbursed by size



Source: AgriTrade

Figure 5: Commodities purchased with loan proceeds



Source : AgriTrade

3.5 BUSINESS DEVELOPMENT

Training in business skills is much in demand by farmers, companies, and other organizations including those managing grant-funded activities and borrowing from AgriTrade. Table 9 summarizes the number of farmers trained this year in the three key areas of crop budgeting (8,527 beneficiaries), credit management (3,421 beneficiaries) and record keeping (2,756 beneficiaries). Under credit management, the business development team was extremely busy in June as crops were harvested and processed, discussing the obligations of contract production in an attempt to minimize side marketing of contracted commodities. The program also provided training in capacity-building of farmer groups, companies, and other organizations involved in value chains targeted by Zim-AIED. Specific assistance in business planning was provided by Zim-AIED's senior managers and financial controller to some of the larger companies contracting smallholders.

Table 9: Beneficiaries trained in BDS by Zim-AIED, FY2011 & FY2012 (Q1-Q3)

BDS training subjects				
Commercial/ Development Partner	Credit management	Crop budgets	Record- Keeping	Total ⁴
Matanuska	150	573	113	836
Capsicum	848	268	243	1,359
Prime Seed	118	672	235	1,025
O'Enem Meats	27	216	0	243
FAVCO	75	14	58	147
ZFAT/Windmill	288	162	90	540
Harare Produce sales	46	12	0	58
AgriTrade	203	328	64	595
SAT/Progene	586	5,155	1,676	7,417
Care International	349	644	268	1,261
Tjinyunyi Babili Trust	69	74	0	143
National Distributors	0	105	0	105
Mercy Corps	662	304	9	975
Total	3,421	8,527	2,756	14,704

⁴ The total does not account for double counting- farmers counted under one training area were also counted under another training area.

3.6 PRODUCTIVITY

Productivity training in crop agronomy, irrigation, livestock management, and postharvest processing was carried out intensively throughout the quarter by the Zim-AIED technical team and extension workers employed by partner organizations. Sub-grants with SAT, Prime Seed, Matanuska, Capsicum, FAVCO, Better Agriculture, Agriseeds, O'Enem Meats, and Inala Enterprises, and a subcontract with CARE provided additional technical and marketing resources to food and cash crop growers and livestock farmers across the whole country. The Zimbabwe Farmers Alliance Trust was supported with Zim-AIED extension staff under an MOU. New grants to Agriseeds (groundnuts) and Inala Enterprises (cattle and goats) were approved this period. Total disbursements reached \$2.45 at June 30th, equivalent to 49 percent of the sub-grant budget. "Recoverable grants" that beneficiary farmers and companies agreed to re-pay from sales returns, accounted for 62% of the total disbursements.

3.6.1 Staple Food Crops

An additional 8,074 new beneficiaries were trained this quarter among the four staple crops' partners - SAT (5,606), Prime Seed (711), ZFAT (775), and CARE (982). The main topics covered were contract farming, fertilizer application; weed control; record-keeping; harvesting techniques; postharvest management; and storage systems. The February mid-season dry spell depressed production in general, but many contracted farmers achieved relatively high yields by planting early, applying fertilizer and compost to optimum plant populations and using herbicides to control weeds. Contracted rain-fed groundnut farmers in Mutoko and Murewa obtained yields of up to 0.8 MTs per hectare and maize farmers in Chiweshe and Guruve achieved yields of over 4.5 MTs per hectare, double their traditional average yield (Table 10).

Table 10: Estimated crop production of maize and groundnut around Zim-AIED agribusiness hubs

Province	# of Sites	# of beneficiaries	Maize Yield(tons)		Groundnut Yield (Kilos/ha)		Buyers
			Total	Sales*	Total	Sales*	
Mashonaland Central	4	1,419	7,814	3,461	736	287	Progene Seeds; Northern Farming
Mashonaland East	10	1,810	2,780	1,070	450	182	Progene Seeds; Prime Seed
Mashonaland West	17	7,428	6,895	3,410	315	49	Progene Seeds; Produtrade
Manicaland	8	1,22	809	104	201	41	AgriSeeds; Matanuska
Masvingo	8	5,418	3,745	775	768	110	Capstone
Matabeleland North	3	311	775	56	-	-	Capsicum; National Distributors
Matabeleland South	8	1,247	928	389	37	12	Capsicum; National Distributors
Total	58	18,855	23,746	9,265	2,507	681	

*Estimated sales after retention for home consumption and processing (see also below figures 6 and 7)
Source: Zim-AIED

Figure 6: Production of Maize around Zim-AIED Agribusiness Hubs

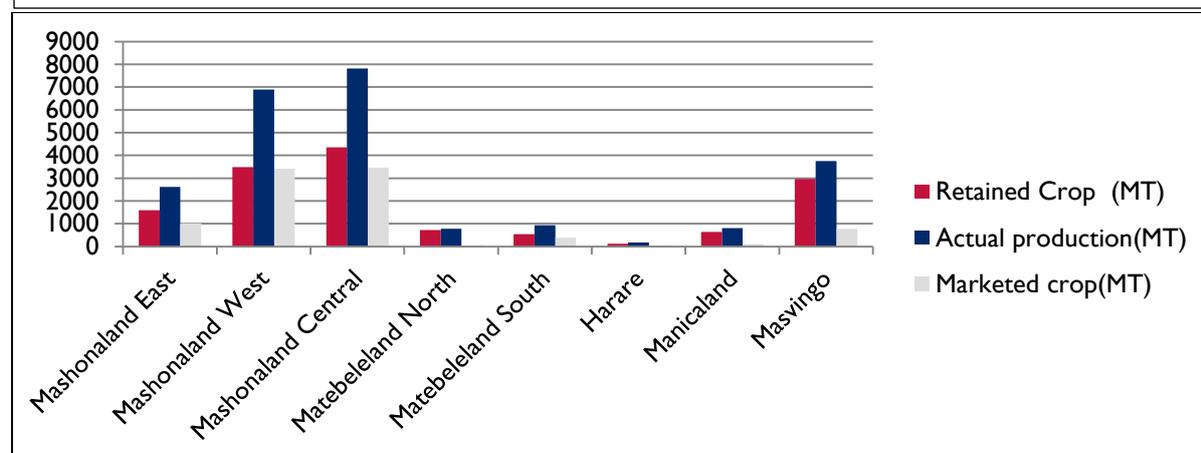
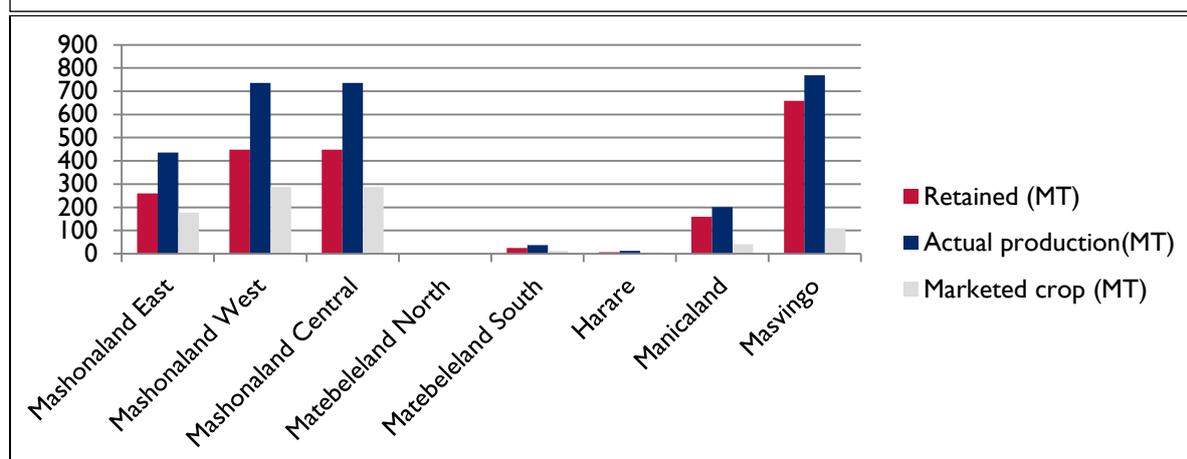


Figure 7: Production of Groundnut around Zim-AIED Agribusiness Hubs

Production of maize and groundnut around Zim-AIED agribusiness hubs (SAT demos) reached 20,000 MTs and 3,000 MTs respectively. Farmers indicated that 60-70% of this will be retained for home consumption and processing and the balance will be sold (figures 6&7), contributing significantly to the food security of more than 20,000 families. Buyers of sugar bean actively contracted more than 3,000 Zim-AIED assisted growers. Matanuska contracted 1,266 farmers to grow 451 hectares at Mutema, Chibuwe, and Musikavanhu irrigation schemes in Manicaland. Capsicum contracted 350 farmers at Chibuwe and Musikavanhu, and 423 farmers at Makwe irrigation scheme in Matabeleland South. FSG contracted 900 growers in Gweru and Gutu and agreed to buy 60 MTs of un-contracted beans from 450 farmers in Deure irrigation scheme, Manicaland. Farmers received certified seed, fertilizers, and chemicals on credit to be repaid from crop sales. Makwe and Gweru were hit by frost in June and yields will be about 50 percent below expected. The quarter ended as sugar bean sales were just starting. Deliveries of soybeans by growers contracted to O'Enem started successfully and the company will also take all surplus soy and maize for its new feedlot in Chiweshe. Farmers growing sweet potato commercially for the first time in Gweru and Gutu sold 115 MTs (\$38,000) to various buyers.

In all, 79 field days were conducted countrywide this quarter for farmers on the Zim-AIED program and other value chain stakeholders. More than 20,000 farmers, traders and inputs suppliers, and local officials attended the events, including government representatives, policymakers, and traditional leaders. Many participants were surprised to see improved yields on previously degraded lands, clearly showing that productivity can be increased in marginal areas by following proven technologies.

3.6.2 Horticulture

The major products in terms of importance this period were: bananas, oranges, cabbages, tomatoes, gem squash, giant rape, carrots, butternuts, fine beans, cucumber, green pepper and pigeon pea. Combined sales by all Zim-AIED assisted farmers were estimated at \$2.89 dollars (Table 11).

Specific interventions included:

- Continued development of a model commercial banana farm on Mutema Irrigation Scheme in southern Manicaland. Under contract to leading banana production and distribution company Matanuska, 300 farmers have combined to establish a 32-hectare plot of bananas using cutting edge technology (tissue-cultured seedlings, micro-jet irrigation, and customized fertilizer application). Initial yields from demonstration plots suggest that yields of more than 40 tons per hectare will be achieved compared with the national smallholder average of less than 10 tons per hectare.

- Introduction of new postharvest systems to more than 500 small-scale banana farmers in Honde Valley contracted to FAVCO. As a result, purchases from Zim-AIED assisted farmers increased from 110 to 320 tons. At an average price of \$0.23 per kilogram, this provides new income of more than \$28,000, which is equivalent to \$1,160 per hectare per year with considerable potential for yield increases of more than 100 percent.
- Technical assistance to vegetable farmers on irrigation schemes in three wards of Mutoko growing a range of fresh vegetables for Harare Fresh Produce. Zim-AIED provided specialist advice to rehabilitate their irrigation systems so that year-round production and sales can be assured.
- Two hundred and ninety seven smallholder citrus farmers at Negomo Irrigation Scheme in Chiweshe (Mashonaland Central) were assisted in negotiating a contract with Chegutu-based Dodhill Citrus Exporters (Mashonaland West). The farmers have 72 hectares of oranges, of which 60 percent consist of Washington Navel, an easy-peeling variety suitable for both local and export fresh markets. The balance is Valencia oranges, a processing variety that was sold to Interfresh for juicing at Mazowe Citrus estates. The farmers sold more than 150 tons to Dodhill at a farm gate value of \$21,700 for export to South Africa, DRC, and Zambia. They earned additional revenue from roadside sales to give an average return per grower of more than \$300 from plots of 0.2 hectares. The oranges were a spin-off from Zim-AIED's separate intervention to regenerate mangetout and sugar snap pea exports from Negomo that will provide new export income for farmers in the next quarter.
- The technical and credit teams combined to secure a \$50,000 AgriTrade loan from Trust Bank for Sandefer Investments to contract smallholder farmers in the production of vegetables at Silalabuwa Irrigation Scheme in Matabeleland South. Initially, Sandefer will concentrate on out-of-season cabbage and tomato to supply existing customers, but will the Scheme will eventually expand production to include potato and other crops. The company is providing growers with a full package of hybrid seedlings, inputs and marketing services. Zim-AIED is providing technical assistance and training. Silalabuwa is a gravity fed scheme of about 400 ha and presents good opportunities for other commercial partners to contract farmers for a range of products backed up by irrigation management and crop production support from the Program.

Table 11: Estimated distribution of Zim-AIED horticulture farmers

Crop	# of Farmers	Location	Estimated Area (ha)	Prodn (t)	Value (\$)
Bananas	556	Honde Valley	200	315	94,500
Citrus	296	Mazowe	72	1584	221,760
Carrots	400	Mutoko	40	1200	1,200,000
Fine Beans	96	Mutoko	9.6	115	115,000
Butternut	150	Mutoko	8.5	213	170,400
Giant Rape	316	Mazowe/Murewa/Mutoko	13.8	138	27,600
Green pepper	74	Mutoko	14.8	370	296,000
Tomatoes	500	Mutoko	25	2250	450,000
Peas	259	Mazowe/Murewa/Mutoko	14.7	74	74,000
Cucumber	124	Murewa/Mutoko	7.4	222	133200
Squash	50	Mutoko	6	180	72,000
Cabbages	269	Insiza/Mazowe	24	3120	151200
Pigeon pea	300	Murewa	30	65	32,500
Green maize	346	Mazowe/Murewa	26.8	80	107200
Leafy vegetables	360	Mazowe/Murewa	15	225	45,000
Total				10151	2,894,656

3.6.3 Value Addition

The main value addition activity this period was technical support to more than 3,000 paprika growers contracted to Zim-AIED partner Capsicum as crop harvesting and drying started up across the country. Initial results were mixed following low rainfall and frost in some areas but high yields of around 2.5 tons per hectare were achieved by some farmers in Karoi and Nyanga areas. Paprika deliveries are still in progress and the bulk of the crop purchased so far is of good quality with approximately 80 percent of pods being grade A. Sales in the quarter were 134,407 kilograms valued at \$185,496 (Table 12). Farmers are receiving cash payments of up to \$1.50 per kg for grade A paprika; \$0.80 for grade B and \$0.40 for grade C less deductions for inputs advanced at the beginning of the season.

Table 12: Total paprika purchases by Zim-AIED beneficiaries for Q3, 2012

Area	Paprika purchased (kg)	Value of purchased paprika (\$)
Headlands	21,607	31,994
Karoi	53,547	75,222
Nyanga	18,508	27,630
Odzi	8,750	10,202
Temaruru	2,867	3,727
Chihota	2,840	3,667
Dewedzo	3,022	3,623
Chipinge	6,585	8,445
Mutare	2,606	3,346
Hwedza	3,367	3,845
Uncontracted – Harare	2,608	3,265
Tshongokwe Mat South	4,300	5,590
Lukosi Mat North	800	1,040
Other schemes Mat South	3,000	3,900
Total	134,407	185,496

Technical assistance and training this period included

- Efficient drying techniques, postharvest handling to minimize contamination, grading and packing. Capsicum provided its 2,652 contracted paprika farmers with clean plastic sheeting for drying as a way of minimizing aflatoxin and bacterial contamination of the harvested pods.
- Business training on marketing, specifically honouring contracts and negative implications of side marketing.
- Safe use of pesticides to protect crops from powdery mildew, a common and fast-spreading fungal disease that defoliates paprika and reduces crop yield.

3.6.4 Livestock

The main activities this quarter focused on providing extension support, training, and technical assistance to the farmers contracted to O'Enem Meat Products for supply of maize and soy bean, as well as on rehabilitation activities to boost throughput for its abattoir in Chiweshe Mashonaland following a new joint venture to establish a feedlot adjacent to the plant. In Matebeleland North and South, training and technical assistance on good animal husbandry practices continued with partners Tjinyunyi Babili Trust (TBT) and Inala Enterprises. Specific activities included:

- Completion of water reticulation systems, pig sties, feedlot, and borehole at O'Enem. This will increase reliability of supply and increase throughput to achieve the slaughter targets of 100 pigs and 125 head of cattle per month.
- The feedlot, with a capacity to hold 360 head of cattle was established in a partnership between O'Enem Meats and Comtex, a major cattle rearing and livestock trader. Comtex also signed an agreement to buy maize and soy from contracted farmers in Chiweshe.
- The 300 sow piggery unit, which has been lying idle since 2008, was refurbished with all the pigsties connected to clean borehole water and each unit individually served by pig-friendly nipples. Watering the pens with nipples is an efficient way of providing the animals with clean water while reducing the wastage of water, keeping the sties dry, and reducing labor and cleaning costs. The waste water flows through anaerobic tanks to fishponds.
- The 682 farmers contracted to grow maize and soy beans for O'Enem received training and technical assistance to cover specific aspects of harvesting and postharvest handling. Four field days were well attended by 514 farmers, other NGO, government departments, and other companies. A crop assessment indicated average yields of at least 1 MT per hectare for soy beans and 4 MTs for maize that should give a total of at least 300 tons of soy beans and 1,200 tons of maize from the contracted growers
- The partner fund agreement between Inala Enterprises in Matabeleland North and Zim-AIED was signed and approved. Inala will expand its cattle and goat leasing operation to smallholder farmers; buy livestock from them for its meat market at Nkayi business center; co-fund training to improve meat quality; and bring in good quality bulls to the area. Through a recoverable grant from Zim-AIED, Inala enterprises bought two Beef Master bulls and 26 breeding heifers to begin an innovative heifer and bull loan and leasing scheme that will increase herd sizes and improve breeds for 1,000 smallholder livestock producers in Nkayi district, Matabeleland North. The cattle will be loaned to carefully selected small-scale livestock farmers to commercialize their herds.
- Two nucleus centres were established at Dakamela Village and Ezinyangeni Village, Nkayi district North Matabeleland. Thirty para-vets from Inala Enterprises underwent training of trainers courses in good animal husbandry practices to address the general lack of knowledge of the beef calendar; winter management practices including castration, dehorning and supplementary feeding; vaccination protocol; and marketing of cattle and goats. The para-vets will play a critical role of cascading all the Zim-AIED trainings to the livestock farmers on a regular schedule. At the same time, a total of 531 beneficiaries (304 women and 227 men) were trained in good husbandry practices.
- In partnership with TBT, technical assistance and training was provided to 62 para-vets and 657 farmers in Matabeleland South were trained on good husbandry practices.

3.6.5 *Irrigation*

During this quarter irrigation activities focused on providing technical assistance and training to farmers and extension staff from private companies and public institutions on irrigation schemes where Zim-AIED is commercializing smallholder production (Table 13). More than 2,600 farmers on 10 irrigation schemes were assisted this quarter, bringing the total cumulative schemes assisted to 34 with more than 7,000 farmers.

on agricultural production unless farmers adapt to the new conditions. At the same time, many practices associated with agricultural production actually emit GHGs and contribute to global warming, so need to be restricted. Climate change models are in general agreement that temperatures are rising in Zimbabwe but there is a high degree of uncertainty regarding rainfall levels and seasonality. Zim-AIED is therefore promoting “no regrets” interventions: adaptation and mitigation measures that have positive returns on productivity, profitability, environment, biodiversity, risk-reduction, and future adaptability regardless of climate changes. The following strategies and specific agricultural practices and technologies being implemented by Zim-AIED take these factors into account.

4.1 COMMERCIALIZATION

All studies on smallholder adaptation to climate change show that the best way to adapt to change is by focusing on profitable production. Farmers who are profitable have greater motivation to try new varieties and crops that can produce commercial yields at higher temperatures or with less water, and invest in technologies that increase productivity and use water more efficiently. This principle underpins Zim-AIED’s approach and all activities relating to climate change and environmental management. Increasing whole farm productivity and yield per unit area of farm land are critical aspects of the Zim-AIED approach, given that land conversion (including de-forestation) already accounts for nearly 20 percent of global CO₂ emissions. This means that most increases in food crop production have come in the past from using more land rather than using existing farms more efficiently. So Zim-AIED stresses the need to increase production per unit area on current farm land. This will reduce rates of land conversion and is one of the primary climate change mitigation measures being promoted by the program. It is also consistent with Zim-AIED’s commercialization objectives because increased productivity almost always translates into greater profitability.

4.2 GOOD AGRICULTURAL PRACTICES (GAPS)

Most GAPS have positive climate change adaptation and environmental outcomes, and many also have mitigative qualities. Practices promoted by Zim-AIED such as biological and integrated pest management; efficient water collection, conservation and irrigation systems; low tillage techniques; wind and water erosion barriers; composting, mulching and cover crops to improve soil texture; and use of drought tolerant crop varieties all have positive commercial and environmental impact as well as reducing farm costs. For these reasons, more and more end-market buyers are requiring suppliers to incorporate through specific protocols such as GLOBALGAP which ensure that GAPS are market-led and profit-driven. Some of these practices are explained in more detail below.

4.3 CROP SELECTION

Zim-AIED is promoting a diversified, whole farm approach to commercialization that reduces risk from extreme environmental events and increases net incomes. We are also introducing and testing new crop varieties that are adapted specifically to long-term changes including increases in temperature and evapotranspiration, reduced rainfall, and increases in soil salinity.

- Efficient mixed farming systems reduce both economic and environmental risks for small-scale farmers since if one crop fails others will still provide food and income. Including perennial as well as annual crops also improves soil structure and reduces labor requirements. Trees and other deep-rooted crops also bring nutrients to the surface for recycling so reducing fertilizer demand. Zim-AIED interventions production in Honde Valley and Manicaland include mixed farming of banana, avocado, beans and maize is a good example of this approach.
- To achieve optimum returns, farmers must also select crops and varieties that can produce competitive yields in their specific environment. In the drier, hotter parts of Zimbabwe this

means they must select short cycle maize varieties that mature quickly and therefore have lower overall water requirements. During this season, Zim-AIED demonstrated more than 20 different maize varieties with thousands of farmers on more than 50 demonstration sites across the country. An agreement was reached with Delta Corporation for 2,000 smallholders to grow cassava under contract in low rainfall areas (for low-cost beer production). Cassava can produce at least 15 MTs per hectare in areas where maize and other food crops cannot be grown successfully.

4.4 WATER MANAGEMENT

Farmers planting seasonal rain-fed crops and growers on irrigation schemes have received continuous training during the year on water collection, conservation, and distribution systems. Rain-fed farmers in general did not have the financial resources to invest in rainwater collection and storage on a bulk scale, so in-field techniques for temporary collection and conservation were stressed. The 10 irrigation schemes surveyed were all wasting water on a large scale from leaking canals and pipes and received technical assistance to start the process of rehabilitation and repair. All of the 30 irrigation schemes inspected so far need changes to their systems to use water in the most efficient way.

- More than 100 field demonstrations across the country included mulching, composting, and raised beds as effective techniques for “collecting” and storing water at field level. The demonstrations also stressed minimum tillage systems that conserve water in the soil as well as reducing soil emissions of GHGs. Weed control is the single biggest labor cost for smallholders and, since weeds compete directly for water and nutrients, they have a negative effect on yield and water availability. Farmers were shown how to select and apply herbicides for maize, soya, and paprika that cut costs and increased productivity dramatically.
- Rain-fed groundnut farmers in Mutoko were shown how to apply a ridge-and-furrow to increase water availability and yields.
- Zim-AIED has provided technical assistance to more than 30 irrigations schemes across the country and worked with 10 of them during this quarter to rehabilitate and repair systems and increase crop productivity and profits for individual growers. Most schemes have leaking canals, silted-up dams, broken pumps, and other infrastructural problems. In some cases, such as Mutema in Manicaland and Makwe in Matabeleland, farmers have responded immediately to technical and commercial proposals by creating maintenance funds that all members contribute to each month.
- Traditional flood and furrow irrigation systems are wasteful of water and lack the capacity for precision application. To demonstrate the benefits of technology for water management Zim-AIED assisted 250 growers at Mutema to install a micro-jet system on 32 hectares of bananas. The micro-jets target the plant root zones precisely so that water losses from soil evaporation and deep drainage are minimized. By investing in micro-irrigation and repairing the worst leaks in water distribution systems, growers are achieving four to five times average yields with massive increases in productivity.

4.5 SOIL FERTILITY

Although inorganic fertilizers have great capacity to increase crop yields and productivity, their manufacture and distribution is highly energy intensive and contributes significantly to GHG emissions. Zim-AIED is therefore promoting cropping systems that recycle nutrients as far as possible and reduce the cost and environmental impact of supplementary fertilizer.

- Conducting a soil analysis provides essential information on potential yields and remedial actions needed before planting. It gives the information necessary to make decisions on how

much lime to use; how much fertilizer; how to adjust the soil pH for optimum growth; how to apply soil amendments and fertilizer to improve soil quality; and shows which nutrients that are lacking or in excess in the soil. For most of the demonstration plots countrywide, Zim-AIED collected soil samples and analyzed for pH and the major elements. We have a database of the results available to make relatively accurate recommendations for future demonstrations or farmer use in those areas. This will help in the specification of optimal application rates for inorganic fertilizers.

- Crop rotation to include legumes ensures crop nutrients circulate and are recycled. Almost all Zim-AIED farmers are adopting this basic technology. Farmers also apply compost and manure in combination with rotation which has an immediate effect on soil fertility and texture that reduces supplementary fertilizer needs and increases water holding capacity. In addition to providing essential nitrogen to plants, legumes act as a “sink” for nitrogenous GHGs in the air.

4.6 GREENHOUSE GASES

Zim-AIED-assisted farmers are encouraged to avoid burning crop residues that produce CO₂ and other GHGs and use the residue in compost production that actually locks up the GHGs. At the same time, by planting crops at optimum density and including perennial plants and tree crops in their farming systems, farmers contribute to GHG storage in the permanent biomass of their farms. Drying paprika on-farm or at source also eliminates the energy-intensive process of forced drying and reduces the economic and environmental costs of transportation by 60 percent.

4.7 LIVESTOCK MANAGEMENT

Cattle and goats contribute significantly to global methane emissions and global warming but are a traditional and probably essential part of Zimbabwean farming systems in arid and semi-arid areas. They graze on plants that grow on land unsuitable for cropping and, in some cases, provide the only income-generating option for rural households.

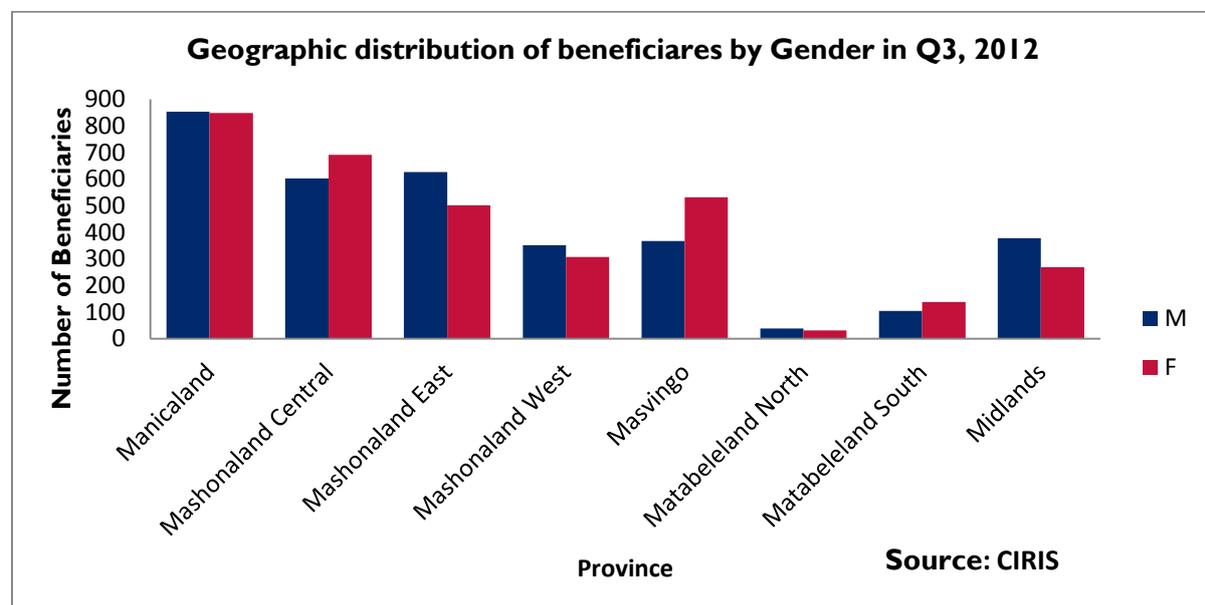
- Zim-AIED is training farmers to improve livestock waste management through covered lagoons, improving ruminant livestock productivity through improved diet, nutrients and increased feed digestibility; improving animal genetics, and increasing reproduction efficiency.
- Atmospheric warming and changes in the distribution of rainfall may lead to changes in the spatial and temporal distribution of diseases and parasites that affect the health of animals. Hence, Zim-AIED is advocating for farmers adopting a health management calendar of vaccinations, deworming, dipping and timely treatment of diseases.
- In Matabeleland, the livestock team in collaboration with the Department of Livestock Production is training farmers on proper use of rangelands to avoid over-grazing and land degradation. The trainings include methods of veld reinforcement, use of agroforestry species and agroforestry products, and the use of crop residues and other fodder crops in order to increase carrying capacity of the land, improve on species diversity and reduce erosion.
- Throughout Masvingo and Matabeleland, Zim-AIED is training farmers to adopt integrated systems that capitalize on the effective interaction between crops and crop-related products to provide feed for livestock. The livestock returns manure to fertilize and mulch crops. Integrated crop-livestock systems can positively affect biodiversity, soil tilth, organic matter, water infiltration, water retention, forest preservation and adaptation to and mitigation of climate change.

4.8 AGROCHEMICALS

Manufacture of agrochemicals is an energy-intensive process that generates GHGs. In addition to this, pesticide residues can have negative impact on beneficial species as well as the pest being targeted. Pesticides are also expensive and often difficult to apply effectively. For these reasons, Zim-AIED is training all beneficiaries to employ integrated pest management systems that control pests and diseases more safely, efficiently, and cost-effectively by minimizing agrochemical application and maximizing biological controls. Wherever possible, varieties of target crops are recommended that have tolerance to common pests and techniques such as grafting and top-working of tree crops are taught, to provide genetic resistance from rootstocks. During this period, a draft of the program PERSUAP document was submitted to USAID for approval. One of the major considerations in coming up with this list is whether the pesticides are environmentally friendly. Checks were made to confirm each product has EPA approval as well as being locally registered. Compliance with the PERSUAP list by all Zim-AIED beneficiaries will ensure that only environmentally friendly pesticides are used by Zim-AIED and other USAID-funded projects in Zimbabwe.

5. GENDER

Zim-AIED's commitment to gender integration is assisting thousands of women throughout Zimbabwe improve the quality of lives for themselves and their families through higher crop yields, improved microenterprise development and expanded markets. This gender commitment continued in quarter three where 3,321 beneficiaries (50 percent of the total) were female. 49,631 (50 percent of the total) female farmers and business owners participated in training events or received improved access to credit as a result of Zim-AIED activities this quarter.



During training events conducted this quarter, a special emphasis was placed on improving water access and introducing irrigation technologies for smallholder farmers working on irrigation schemes to help ensure production throughout the dry winter months. Water access is a constraint to agricultural productivity for both women and men, but women bear the brunt of the burden of water scarcity because 67 percent of farmers working on irrigation schemes assisted by Zim-AIED were female in FY2012 and they are responsible for collecting water for both household and

8. CHALLENGES

Lessons learned during implementation of the program this quarter were described in Section 6. The main strategic challenges facing the development of agribusiness, especially for small-scale farmers, that affect implementation of Zim-AIED, are outlined below:

- Despite Zim-AIED interventions, low productivity is almost certain to remain a problem at national level. This is because most farmers on communal land are completely dependent on rainfall, which was inadequate for crop production in some areas this quarter. Many smallholders are farming on soils with sub-optimal pH (high acidity) and low fertility, which take several years to rehabilitate. Much of the potentially productive land, where high yields can be achieved, is held by A1 and A2 farmers not accessible to the program.
- Two of the participating AgriTrade financial institutions, Trust Bank and Micro King, continued to have liquidity issues during this reporting period, resulting in serious delays on behalf of the banks in meeting their 1:1 matching requirement and, subsequently, reduced rates of disbursements.
- Sustainable agricultural development needs rural investment in a range of agribusiness activities covering production, processing, logistics, and marketing. Although Zim-AIED is contributing actively to short-term credit availability, long-term investment funds are almost non-existent and traditional private sector investors are still reluctant to invest outside of Harare. This applies particularly to processing of fruits and vegetables that was previously an important part of the agriculture sector but now is almost non-existent. New rural entrepreneurs are emerging and receiving support from Zim-AIED but their progress is slow in the absence of investment funds.
- Irrigation schemes are a good example of the previous point. They represent a potential opportunity for smallholders to become successful commercial farmers but require a massive amount of new capital investment for rehabilitation and upgrading. Donors and government are making piecemeal interventions which inevitably fail when the support ends, instead of developing and financing a national strategy for commercialization of the irrigation sub-sector.
- The future of contract farming and commercialization is threatened by the recent development in the cotton sector where government has effectively controlled marketing of the seed cotton crop and disregarded investments and contracts by private sector with smallholder cotton farmers.

9. CONCLUSIONS

After 21 months of implementation, 40 percent of the way through the program, Zim-AIED is on course to meet its main objectives. A summary of performance against PMP indicators is shown in Annex 2. Many of the figures cannot be calculated for this quarter since the main target crops are still being sold but good progress is being made as indicated in the summary below:

- **Feed the Future indicator 4.5-2.** The FY2012 target is for 10,155 new jobs to be created. Estimates from new partner activities indicated that 4,533 new jobs have been created so far. The number of new jobs will be validated by a survey of farmers and companies next quarter and included in Zim-AIED's annual report for FY2012.
- **Feed the Future indicator 4.5.4.** Field observations showed that gross margins will increase significantly this season for the proxy crops of banana, maize and paprika. Increases

cannot be calculated accurately until after the main cropping season and will be included in Zim-AIED's annual report.

- **Feed the Future indicator 4.5.2-2.** The annual target for the area under improved technology is 20,000 hectares. The 67,000 households that have joined the Zim-AIED program already will probably achieve this but they will be sampled and the area validated and reported in the FY2012 annual report. The same applies to farmers adopting new technologies.
- **Feed the Future indicator 4.5.2-7.** The number of farmers targeted to receive productivity and food security training for the year is 40,000. A total of 50,378 farmers have received training during the first three quarters of the year so the annual target has been exceeded.
- **Feed the Future indicator 4.5.2-42.** The number of private companies, producers associations, water-user groups, or other organized farmer groups targeted to receive technical assistance for the year is 447. To date, an estimated 128 organizations have received support, so this needs to be stepped up over the next six months.
- **Feed the Future indicator 4.5.2-13.** The number of beneficiary households target for 2012 is 33,000. The program reached 45,326 this quarter, exceeding the annual target.
- **Feed the Future indicator 4.5.23.** The value of formal sales by Zim-AIED beneficiaries reached \$9.34 million this quarter (table 4, section 3.2) and \$20 million is projected by September from production figures. Informal sales will be collected by random household survey next quarter to compare with the target of \$77 million.
- **Feed the Future indicator 4.5.2-29.** Cumulative total of disbursed loans from AgriTrade for the nine months to June 30th was \$4.01 million towards a target of \$13 million but the rate of disbursement slowed so the target may not be met.
- **Feed the Future indicator 4.5.2-37.** For the year to date 1,501 MSMEs received AgriTrade loans and other business development services, exceeding the annual target of 150.
- **Feed the Future indicator 4.5.2-38.** The value of new private-sector investment in the smallholder agriculture sector was estimated at \$1.14 million for the year to date, but based on discussions with partners, the annual target of \$4 million will be met. This data will be collected and reported in Zim-AIED's annual report.
- **Feed the Future indicator 4.5.2-42.** An estimated 554 AgriTrade borrowers and Zim-AIED partner organizations improved their management practices and services provided to smallholder farmers, so the annual target of 447 was exceeded.
- **Feed the Future indicator 4.5.2-43.** At least 20 organizations are now operating more profitably as a result of Zim-AIED interventions, so the annual target of 10 has been exceeded.

ANNEX I: SNAPSHOTS

SNAPSHOT

Instead of Food Aid, Farmer Feeds Herself

With good agricultural practices and access to markets, farmer moves family from subsistence to commercial level.



Photo by Fintrac Inc.

Fairesi Nyakudya is increasing her family's income and food security by introducing good agricultural practices to her soy bean crop.

“I am happy to have grown soy beans at a larger scale with guaranteed sale thanks to contract farming.”

Fairesi Nyakudya

Fairesi Nyakudya has had to overcome many obstacles in her life, from her husband's untimely death to last year's debilitating drought. With support from USAID's Zimbabwe Agricultural Income and Employment Development program (Zim-AIED), she is moving her family forward.

As a smallholder soy bean farmer in Chiweshe, Nyakudya had been farming at a subsistence level, struggling to put food on the table and send her children to school. Last year, hoping to receive food aid, Nyakudya joined other farmers participating in business workshops facilitated by Zim-AIED.

She was surprised to find that the program focused on technical assistance and transfer of skills instead of traditional food aid. To learn how to better support herself, Nyakudya continued attending the trainings.

Participant farmers received training in good agricultural practices such as crop spacing, proper fertilizer application, and weed and pest control, all of which can help drastically increase crop yields and quality.

Zim-AIED also linked them with a commercial buyer, O'Enem Meats, who provides inputs and agrees to buy the crops at a negotiated price. The soy bean crop will provide animal feed for the O'Enem Meats abattoir.

Now Nyakudya is increasing her income and her family's food security by employing the improved practices and skills she learned from Zim-AIED. With the additional income, she plans to improve her farm – investing in a fence and doubling her soy bean crop. She can now pay her children's school fees with ease and purchase other necessary household goods.

Her dedication and commitment are paying off in more ways than one. She won first prize for her soy bean crop at a recent field day event and took home a prize in the maize category.

Soy bean is reputed for its high protein content and is now regarded as a cash crop and food supplement in Chiweshe. The 300 contracted farmers say although the crop is relatively new to them, with the improved technologies and access to inputs, they are optimistic for significant increases in yield and income.

SNAPSHOT

Access to credit stimulates financial growth

With three AgriTrade loans, small business owner expands production and supply in rural Zimbabwe



Photo by Fintrac Inc.

Rophina Beselemu stands in front of her piggery, which supplies another local family-run butchery. Rophina plans to continue expanding her business to better serve her community.

What is AgriTrade?

A \$10 million revolving credit fund geared toward the agricultural sector. Local financial institutions established the fund with 50 percent of the support coming from USAID. Agribusinesses, including processors, traders, exporters, and wholesalers can access AgriTrade loans to purchase crops and livestock from smallholder farmers. AgriTrade is assisting hundreds of small and medium-size businesses, resulting in millions of dollars of new investment. To date, AgriTrade has disbursed more than \$6.5 million in loans since September 2011.

Rophina Beselemu, 44, from rural Goromonzi district, is an inspiring example of a true entrepreneur. Despite difficult economic conditions, she was able to expand her business through hard work and creative thinking.

Seizing on a unique opportunity, Beselemu accessed three loans through the AgriTrade revolving fund implemented by USAID's Zimbabwe Agricultural Income and Employment Development (Zim-AIED) program. By tapping into credit offered by three of Zimbabwe's leading banks, rural business owners like Beselemu have the opportunity to expand their products and services to meet market demand.

"Three loans from MicroKing enabled me to run a piggery, maize milling and poultry operations, and an agro-inputs business," she said.

Beselemu is referring to her small-scale commercial livestock operation, where 20 employees care for 182 pigs and 944 chickens, which are sold to a local family butchery. Although she has owned and operated her business for years, access to AgriTrade loans allowed her to expand her business by more than 50 percent.

Beselemu is currently in the process of repaying her third loan of \$6,000. She took out two previous loans in 2011, and was able to build credit through timely repayment of loans.

She hopes to expand her business to supply smallholder farmers with seedlings for horticultural crops and work with them to market their crops to commercial buyers and exporters. Beselemu also purchased a car for herself, increasing her mobility and access to suppliers and buyers.

Prior to the introduction of Zim-AIED's AgriTrade fund, many Zimbabwean rural traders and entrepreneurs like Beselemu had virtually no access to formal credit to purchase surpluses of maize and other crops grown by smallholders. Instead, the banking system catered overwhelmingly to urban populations, largely ignoring the 75 percent of the country's population residing in rural areas.

"Lack of cash in rural areas meant farmers were often unable to sell crop surpluses at fair prices," Beselemu said. "The loans have helped me trade more meaningfully."

As a result of her business expansion, Beselemu will be able to supply some of these previously-marginalized smallholder farmers, further expanding and stimulation economic growth in the agricultural sector.

ANNEX 2: PERFORMANCE INDICATOR SUMMARY TABLE

#	Indicator	Source	Unit	Baseline	FY2011		FY2012					Variance		
					Target	Actual	Target FY2012	Q1	Q2	Q3	Q1+Q2+Q3			
Project Objective: Increased Rural Incomes and Food Security														
1 ³	# of rural hh benefiting from USG assistance	FTF 4.5.2-13	Hh	0	22,038	22,038	33,000	18,511	20,170	6,645	45,326	+ 12,326		
2	Net income per hh from target agricultural products	Custom (AIED 1)	US\$	190.30	-	-	300	TBD	TBD	TBD	TBD	TBD		
3	Value of incremental sales attributed to FTF implementation	FTF 4.5.2-23	US\$ m	0	1.58	1.58	77.42	2.95	2.39	3.99	9.33 ¹	TBD		
Intermediate Result: Increased Agricultural Production														
4	Volume of production by program beneficiaries	Custom (AIED 2)	Tons	61,600	0	0	96,000	5,879	4,563	6,471	16,913 ²	TBD		
5	Value of production by program beneficiaries	Custom (AIED 3)	US\$ m	24		0	40	TBD	TBD	TBD	TBD	TBD		
6	Area grown per target product ³	Custom (AIED 4)	Ha	Maize	16,000	0	0	32,000	20,000	n/a	n/a	20,000	TBD	
				Paprika	100				800	n/a	n/a	800		
				Banana	100				800	n/a	n/a	800		
7	Average yields per target product	Custom (AIED 5)	tons/ha	Maize	1.35	0	0	3.0	n/a	n/a	2.1	2.1	TBD	
				Paprika	0.72				1.5	n/a	n/a	1.0	1.0	
				Banana	1.74				12.0	n/a	n/a	12.0	12.0	
8	Gross margin per unit of land, kilogram, or animal of selected product	FTF 4.5.4	US\$/ha	Maize	37.10	0	0	500	n/a	n/a	n/a	TBD	TBD	
				Paprika	219.64				900	n/a	n/a	n/a	TBD	
				Banana	416.00				500	n/a	n/a	n/a	TBD	

¹ Figures are for Zim-AIED supported commodities, which are a partial representative of the farmers' source of sales income. Full sales figures for calculation of incremental sales will be verified through the Gross Margin Survey, available at the end of year

² See 1 above, does not cover all commodities produced by the beneficiaries. Gross Margin Survey results available at end of year will provide total volume of production figures by all beneficiaries.

³ Figures are based on information from Zim-AIED commercial partners' returns, to be verified with figures from Gross Margin Survey, available at end of year.

	Indicator	Source	Unit	Baseline	2011		2012					Variance
					Target	Actual	Target	Actuals				
							FY2012	Q1	Q2	Q3	Q1+Q2+Q3	
Intermediate Result: Increased Agricultural Production												
9	# of food security private enterprises (for profit), producers organizations, water users' associations, women's groups, trade and business associations, CBOs receiving USG assistance	FTF 4.5.2-11	Enterprises Organizations Groups Associations	0	333	333	447	-	128	156	284	-163
Intermediate Result: Expanded Market Access												
10	# of buyer and market-related firms benefiting directly from interventions	Custom (AIED 9)	Buyers/ Firms	0		305	1,300	221	118	113	452	-848
11	Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation	FTF 4.5.2-38	US\$ m	0	2.78	2.78	4	-	-	1.14	1.14	-2.86
12	# of firms (excluding farms) or CSOs engaged in agricultural and food security-related manufacturing and services, now operating more profitably because of USG assistance	FTF 4.5.2-43	Firms/CSOs	0	-	-	10	-	18	2	20	+10
13	# of farmers in out grower and contract farming schemes	Custom (AIED 8)	Farmers	0	5,000	-	10,000	-	13,026	5,188	18,214	+8,214
14	# of jobs attributed to FTF implementation	FTF 4.5-2	FTE	0	155	2,204	10,155	1,851	2,017	665	4,533	-5,622

	Indicator	Source	Unit	Base-line	2011		2012					
					Target	Actual	Target	Actuals			Variance	
							FY2012	Q1	Q2	Q3	Q1+Q2+Q3	Q1+Q2+Q3
Sub-Intermediate Result: Increased Technology Adoption												
15	# of hectares under improved technologies or management practices as a result of USG assistance	FTF 4.5.2-2	ha	0	500	500	20,000	TBD	TBD	TBD	TBD	TBD
16	# of farmers and others who have applied new technologies or management practices as a result of USG assistance	FTF 4.5.2-5	Farmers	0	11,896	11,896	40,000	TBD	TBD	TBD	TBD	TBD
17	# of individuals who have received USG supported short term agricultural sector productivity or food security training	FTF 4.5.2-7	Individuals	0	11,896	11,896	40,000	11,194	26,504	12,680	50,378	+10,378
18	# of private enterprises, producers organizations, water users' associations, women's groups, trade and business association & CBOs that applied new technologies or management practices as a result of USG assistance	FTF 4.5.2-42	Enterprises/ Organizations / Groups/ Associations	0	333	333	447	300	128	126	554	+107

	Indicator	Source	Unit	Baseline	2011		2012					Q1+Q2+Q3	Variance
					Target	Actual	Target	Actuals					
							FY2012	Q1	Q2	Q3			
Sub-Intermediate Result: Increased Finance and Credit Opportunities													
19	Value of agricultural and rural loans	FTF 4.5.2-29	US\$	790,000	-	2,532,400	13,000,000	1,714,537	1,173,820	1,121,843	4,010,200	-8,989,800	
20	# of beneficiaries receiving credit	Custom (AIED 6)	US\$m	1,002	3,050	554	1,300	221	13,144	5,301	18,666	+17,366	
21	Value of cost-sharing with alliance partners	Custom (AIED 7)	US\$m	0	1	0.41	1	TBD	TBD	TBD	TBD	TBD	
Cross-cutting Results: Business and Environment													
22	# of individuals receiving training in business skills	Custom (AIED 10)	Individuals	0	11,895	11,895	10,000	1,435	5,940	4,661	12,036	+2,036	
23	# of MSMEs receiving business development services from USG assisted sources	FTF 4.5.2-37	MSMEs	0	364	-	150	1,245	128	128	1,501	+1,351	
24	# of individuals receiving training in (NRM)	Custom (AIED 11)	Individuals	0	5,948	5,948	5,000	404	8,480	3,268	12,152	+7,152	

³ Indicators # 1, 10, 14 and 19 have been revised from previous similar reports. This is due to data cleaning of AIED and partner data bases.